



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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ATLANTA, GEORGIA 30303-8960

SEP 28 2006

4-APT-APB

Keith Overcash, Director
Division of Air Quality
North Carolina Department of
Environment and Natural Resources
1641 Mail Service Center
Raleigh, North Carolina 27699-1641

Dear Mr. Overcash:

This correspondence is being sent to provide you with an official final copy of the Environmental Protection Agency (EPA) Region 4 report, which was completed as a result of the EPA Title V and New Source Review (NSR) program evaluation conducted the week of June 19-23, 2006, in Raleigh, North Carolina (see Enclosure). The purpose of this program review was to evaluate the status and the ability of the North Carolina Department of Environment and Natural Resources, Division of Air Quality (DAQ) to carry out the duties and responsibilities required to effectively run the Title V and NSR programs, as well as find out how EPA can best assist the DAQ in meeting these commitments.

We would like to take this opportunity to commend the DAQ staff for the effective implementation of both the Title V and NSR programs. EPA Region 4 looks forward to continue to work closely with the DAQ to ensure high quality Title V and NSR programs.

If you or your staff have any questions regarding the report, please do not hesitate to contact Randy Terry of the EPA Region 4 staff at (404) 562-9032.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Farmer".

G. Alan Farmer
Acting Director
Air, Pesticides and Toxics
Management Division

Enclosure



**North Carolina Department of Environment and Natural Resources,
Division of Air Quality (DAQ)
Title V and New Source Review Program Review**

The U. S. Environmental Protection Agency (EPA) Region 4 committed to conduct detailed title V and New Source Review (NSR) program reviews for all state and local programs that have at least ten title V major sources within their jurisdiction. These evaluations also include a review of the title V fees collected and billed annually. This commitment results from an agreement between the EPA Office of Air and Radiation and the EPA Office of Inspector General, which required EPA to conduct title V program evaluations of all state and local programs with at least 10 title V sources. EPA Region 4 decided, in addition to title V, to use this opportunity, when applicable, to evaluate the NSR programs at each of the state and local programs. The program reviews are to be completed by the end of Fiscal Year 2006. The North Carolina Department of Environment and Natural Resources, Division of Air Quality (DAQ) program review was conducted the week of June 19-23, 2006 in Raleigh, North Carolina. Upon EPA's arrival at the DAQ, EPA spent the first day reviewing the title V files and met with DAQ officials to detail the evaluation process and answer any questions DAQ might have. The following two days were used to discuss the title V questionnaire with the DAQ staff and to complete the review of the permit files. The 22nd was dedicated to conducting the NSR questionnaire. The following parties attended the permit file review and title V questionnaire discussion: Randy Terry (EPA Region 4), Scott Miller (EPA Region 4), James Purvis (EPA Region 4), and Charlie Yirka (the DAQ). The NSR questionnaire discussion included Jim Little (EPA Region 4), Scott Miller (EPA Region 4), William Willets (the DAQ) and Charles Buckler (the DAQ).

North Carolina DAQ Title V Program Review

1. Program Review

The DAQ's organizational structure for air permitting resides at the office in Raleigh, North Carolina. All title V permits for the DAQ area are processed in the Raleigh office except those for which permitting jurisdiction is covered under a local title V program. Separate program evaluation reports were written covering the Charlotte/Mecklenburg County and Forsyth County title V programs. The Western North Carolina title V program has fewer than 10 title V sources so an evaluation of their program was not conducted.

The headings in the title V portion of this report duplicate the headings in the title V program review questionnaire administered during the visit.

EPA appreciates the DAQ's efforts to aid the evaluation process by providing an answered copy of the program review questionnaire prior to the meeting. For many questionnaire items, the answers provided by the DAQ are more detailed than indicated in the summary discussion below. The answered questionnaire from the DAQ will be on file at EPA Region 4 for reference.

A. Title V Permit Preparation and Content

Very few of the applications submitted by the sources during the initial round of title V permit issuance contained sufficient information to create the title V permit. The DAQ used State permits as templates to draft the title V permits and requested additional information to supplement the application when necessary. Conflicts between the sources and the State were resolved through negotiation. The DAQ conducted a detailed review of their application and required updating and addendums in an effort to improve the quality of the applications being submitted.

On those occasions where a significant amount of time passes between the application submittal and drafting the permit, the DAQ has a formal process whereby sources are required to update their application and submit a new compliance certification. The DAQ has found that through their requests for additional information and a new compliance certification, the applications are kept current. The DAQ requires annual compliance certifications on March 1 each year, while the application is pending. If a source is determined to be out of compliance and a compliance order is necessary, elements from the order will be inserted within the permit.

Since the implementation of the title V program, the DAQ has improved in their permit writing by standardizing their "boilerplate" language and by continually improving language whenever possible. Additionally, the DAQ utilizes administrative help for public notices, mailings, and copying. The DAQ has found that engineers specializing in specific areas allow the DAQ to process permits most efficiently. To assure quality of the title V permits prior to issuance, each

new draft permit undergoes a series of reviews from the title V permit coordinator, the regional offices and the applicant. The DAQ has experimented with allowing engineers to specialize in certain areas of expertise; that is, assigning permits to other engineers based on the industry type and has found that allowing the engineers to specialize in the various types of industry results in quality improvements. However, the DAQ also encourages engineers to work with other industry types they are not familiar with for professional development purposes.

The DAQ has made specific efforts to streamline their permit issuance by standardizing the format for Federal, and State requirements. On the other hand each engineer recognizes that customizing is required to attain the goals of the title V program. Additionally, the DAQ continually works to improve the language within the permits so that the permits are as clear and concise as possible.

The DAQ permit writers are required to prepare a statement of basis (SB) for each title V permit processed, incorporating the requirements of 40 CFR part 70.7(a)(5). The purpose of the SB is to address all applicable requirements, any streamlining contained within the permit, identification of any deviations in monitoring requirements and the rationale behind these deviations. The DAQ has not needed to provide any formalized training for preparation of SBs. When new engineers are hired, they are assigned the less complex permit applications and are given templates and example permits by other engineers. New engineers are encouraged to interact with the more experienced engineers, title V coordinator and ask questions. Further guidance is provided through permit reviews by the title V coordinator.

The DAQ has experienced delays in permit issuance due to efforts to develop a suitable templates for use in incorporating Maximum Achievable Control Technology (MACT) requirements. To address these delays, the DAQ has formulated a MACT workgroup. The MACT workgroup has created a database that contains each source and its potential MACT status. Ultimately it is the responsibility of the engineer to write the customized MACT condition in a manner relevant to the source. Additional sources of delay for permit issuance include addressing the compliance assurance monitoring (CAM) requirements. The CAM rule is not prescriptive and requires the permit engineers to spend significant time negotiating with the applicants when incorporating CAM into the permits.

Regarding the overall strengths and weakness of the format of title V permits, the DAQ believes the strengths of the format is the promotion of consistency and user readability while maintaining the necessary and relevant customization to meet the goals of the title V program. The complexity of the permit is a weakness but this is a reflection of the complexity of the CAA; there appears to be no way to resolve this particular dilemma.

B. General Permits

The DAQ does not issue general permits to title V facilities.

C. Monitoring

In order to ensure that its operating permits contain adequate monitoring and recordkeeping, the DAQ reviews each permit and evaluates them on a case-by-case basis to ensure practical enforceability. Adequate monitoring requirements are based on DAQ's permit writers' past experiences from similar sources, observations by the regional inspection staff, and general engineering principles. The Supervisor and Title V Coordinator review all permits to ensure that adequate monitoring is included. To ensure that permit engineers are capable of making such determinations and aware of the latest updates in monitoring, DAQ permit writers have attended training courses offered by EPA and other agencies as well used as peer-to-peer training.

D. Public Participation and Affected State Review

The DAQ utilizes one major publication in general circulation (Raleigh News and Observer) and a second local paper in the area of the facility being permitted to give the general public notice of significant title V permitting actions. The DAQ has amended their public notice to include language referring the public to EPA's website for additional information on public participation. If there is no local paper within the county of the permitted facility, the DAQ will publish the notice in a neighboring county. The cost of publishing public notices in the newspaper has ranged from approximately \$90 to \$140 and any costs incurred are paid for by the DAQ. The DAQ also publishes a notice of final determination to announce the end of the citizen's petition period as required by state statute. In addition to meeting the publication requirements in the Raleigh News and Observer and a local paper, the DAQ sends electronic copies of all public notices, draft permit, and SB to each person on the DAQ mailing list. Any persons can be placed on the mailing by making a request of DAQ. Other methods the DAQ uses for public notification include the DAQ website. Information available on the website includes the draft permits, public notice and a calendar with the notice periods indicated. The DAQ believes that the methods currently in use, that is using internet resources and publishing public notices, are adequate to keep the local citizens updated on impending title V actions. When a facility is being permitted has experienced significant public interest on a routine basis, the DAQ will plan a public hearing without a citizens' request. The DAQ does not publish public notices or permits in any language other than English.

When requested, copies of any information relative to the permit issuance are provided at a minimum charge of 0.25 cents per page. However, the use of emails to distribute the necessary information has made the use of hard copies largely obsolete. The DAQ usually is able to respond to public requests for information within five business days. All title V documents are available for inspection by the public by appointment at the DAQ offices in Raleigh and at the Regional office in the nearest proximity to the source, daily, between the hours of 8:00 am and 4:00 pm. Information available for public access includes any permit, application, SB, compliance report or compliance certification. The DAQ has dedicated resources to train citizens on public participation during the title V permitting process and has dedicated staff to assist in issuance of the public notice documents.

Every request to extend the comment period deadline is evaluated on a case-by-case basis by the DAQ. If the DAQ determines that they did not properly follow their criteria for conducting the public notice they will restart the public notice period. Over the years, the DAQ has noticed an overall decrease in the percent of permits that receive public comments. The DAQ noted that almost all of the comments they have received have come from one public interest group (Appalachian Voices), which clearly use "boilerplate" language. The DAQ works extensively with the sources prior to public notice to minimize the potential for permittee comments. On the occasions that the DAQ receives comments from a third party, they are typically minor in nature.

The DAQ notifies all affected states of draft permits by email. The States of Tennessee, South Carolina, Georgia, Kentucky and Virginia qualify as "affected" as well as the three local programs in the state. Additionally, the DAQ treats the Cherokee Indians of Asheville, North Carolina and the Catawba Indians of South Carolina as affected states and notifies them of permitting actions as well when applicable. The DAQ has never received comments from an affected state, nor have they ever provided comments to another program as an affected state.

E. Permit Issuance/ Revision/ Renewal

The DAQ has issued 100 percent of its initial title V permits and is currently working on title V renewal issuance. Other than renewals, the DAQ has been able to process all other title V revisions within the time frames allotted by Part 70. The DAQ is working to streamline the processing of title V renewals but acknowledges that they have not been completely successful. DAQ uses the permit application module (PAM) system to track permit revisions as they move through the permitting process. At the time of the program review, the DAQ had multiple renewal "applications" in-house for more than nine months. The DAQ has developed a report entitled "Title V Accountability Report" detailing the problems they have encountered processing the renewals and are in the process of developing a plan to ensure that the renewal applications are processed in a timely manner. EPA has requested that the DAQ submit a timeline detailing when the backlog of title V renewal permits will be issued. This timeline should include all title V renewal permits that have been in-house in excess of nine months.

The DAQ does not require sources to submit a full application for renewals. The DAQ currently allows sources to submit only revisions to the initial application during the renewal process as well as a compliance certification. However, North Carolina Regulation 15A NCAC 2Q.0513(a) clarifies that the permit renewal process must undergo the same requirements as the initial permit process including a complete renewal application. DAQ regulations require that the title V responsible official certify that all the Facility's current applicable requirements are present and provide the method or methods for determining compliance with the applicable requirements.

F. Compliance

The DAQ requires that owner/operators shall promptly report any deviations from the applicable permit by telephone with a follow-up written report to be submitted within two days. All

deviation reports must be certified by the Responsible Official at the time of submittal. Any malfunction with sufficient duration to cause damage to property or public health must also be reported. The DAQ reviews 100 percent of all deviation reports, semi-annual monitoring reports, and annual compliance certifications. Each deviation report must contain the probable cause of the deviation, corrective actions taken, and the magnitude and duration of the deviation. Following the receipt of a deviation report, the appropriate DAQ regional office reviews the report and evaluates the deviation on a case-by-case basis to determine if an enforcement action is warranted.

The DAQ has developed a compliance certification form. The form requires the source to specify the monitoring method used to determine compliance. Although they do not require sources to use the form, 100 percent of the sources within their jurisdiction utilize the form.

G. Resources and Internal Management Support

DAQ title V fees include an annual fee, an application fee and an emissions fee. Currently, the DAQ charges a title V emission fee of \$17.42 per ton, an application fee of \$8,576 and an annual fee of \$6,074. Title V revenue are processed and tracked within an account with a separate code exclusively for title V. However, North Carolina has a current accounting practice of paying 100 percent of an employees salary under the title V code if the employee is "designated for pay" out of the title V account. This practice leads to some employees getting paid from title V funds for non-title V work and other employees getting paid from non-title V funds for title V work, and does not ensure the appropriate amount of funds are being collected to meet the needs of the title V program. EPA has discussed this practice with DAQ and the changes that must be implemented to correct this practice. The DAQ is working to revise their accounting practices and plans to have a revised accounting system in place by February of 2007.

The DAQ has 124 full time equivalents (FTE) allocated to title V, including 18.5 FTE permit writer positions 100 percent dedicated to title V work. The DAQ ratio of title V permits to permit writer is 20 to one. At the time of the program review, the DAQ had vacancies for 1.5 permit writers and one vacant management position. A full staff of permit writers is currently considered to be 20 permit writers. Staff turnover for the DAQ has been low, having had to fill only one permit writer position in the past year. While the DAQ does not have a career ladder, they do have a payband that can allow them to hire new employees within a range of salaries. Additional ways the DAQ retains employees is the use of flextime and telecommuting. DAQ staff is allowed to start their work hours between 7:30 a.m. and 9:00 a.m. and may choose to telecommute up to two days a week.

DAQ permit writers are afforded opportunities for EPA training, but the DAQ has not developed a written training plan. Most of DAQ's internal training consists of on the job training. The training provided by DAQ, which includes how to develop periodic and sufficient monitoring in permits, enforceable permit terms and conditions as a practical matter and writing a SB, has consisted of learning how to recycle language used in previous title V permits. While this process works well for similar sources, it can lead to a delay in permit issuance when a new

requirement must be addressed within the permits, such as with MACT requirements. DAQ believes that the development of relevant customized language by the permit writers and the need for additional experienced permit writers have been the largest internal issues affecting permit issuance of renewals.

The DAQ does not have an environmental justice (EJ) strategic plan or an in-house coordinator charged with oversight of EJ related activities, but the DAQ permit writers do have access to demographic information necessary for EJ assessments. EPA discussed with the DAQ the potential benefits of using a checklist, such as the Project Awareness Checklist developed by Mississippi, to ensure that EJ issues are accounted for in issuing a new title V permit.

H. Title V Benefits

The DAQ believes that significant benefits have been gained as a result of the title V program including increased awareness by sources of their compliance obligations. Also, title V has resulted in clarity and enforceability of SIP and NSR permit terms and better documentation of the basis for applicable requirements. Other benefits of the title V program and the title V fee revenue include better training, a stable funding source despite fluctuations in other State sources of funding and an improved stationary source emissions inventory.

Program Highlights:

1. The amount of outreach that the DAQ provided during the development of the initial title V permits was extremely impressive and showed a commitment to not only process quality title V permits but to educate the sources on the proper way to prepare a title V application. This outreach resulted in substantial improvements in the subsequent applications received and less employee time spent contacting the sources for additional information to issue the permit.
2. Another area of note has been the DAQ's ability to process their permit revisions well within the 40 CFR part 70 timeframes. The DAQ's commitment to meeting these 40 CFR part 70 timeframes allows the sources additional time to work on other aspects of their title V program as well as working on their PSD and NSR programs.
3. EPA wants to commend the DAQ staff on their overall understanding of their regulations and title V. During the program evaluation DAQ staff demonstrated an excellent understanding of the proper way to implement their regulations.
4. The DAQ does an excellent job in preparing the SB (permit application evaluation (PAE)). The DAQ's PAE adequately describes the rationale for the monitoring, the applicability and any exemptions allowed within the permit.

Suggested Improvements:

1. The DAQ currently allows sources to submit only revisions to the initial application during the renewal process. However, 40 CFR part 70.7 clarifies that the permit renewal process must undergo the same requirements as during the initial permit process including a complete renewal application. The DAQ must ensure that sources submit a full renewal application or, at a minimum submit an application that cross references the initial application, and certify compliance with the renewal application and the portions of the initial application being cross referenced.
2. The DAQ should develop a more formalized training plan for new and existing employees. A formalized training plan will improve the permit writer's ability to develop new permits and incorporate new requirements into the title V permits without waiting for development of a template. Such a training program should help to reduce the length of time it takes to incorporate new requirements into the title V permits.
3. EPA requests that the DAQ submit a timeline detailing when the backlog of title V renewal permits will be issued. This timeline should include all title V renewal permits that have been in-house over nine months. EPA also requests that this timeline be updated quarterly as a rolling timeline until a more formalized process for renewal issuance is developed by EPA.
4. If the DAQ believes that they are in need of additional permit writers to adequately handle the requirements of 40 CFR Part 70, EPA recommends that the DAQ do a work load analysis to determine if indeed additional employees are needed and hire accordingly.
5. Current accounting practices dictate pay of 100 percent of an employees salary if he is "designated for pay" out of the title V account. This practice leads to some employees getting paid from title V funds for non-title V work and other employees getting paid from non-title V funds for title V work and does not ensure the appropriate amount of funds are being collected to meet the needs of the title V program. 40 CFR part 70 requires a title V program to have adequate accounting, to ensure that sufficient fees are being collected to fully fund the title V program. DAQ's accounting system must be able to clearly demonstrate that the appropriate amount of funds are collected and used to implement the title V program.

Summary of Title V File Review

The title V permits reviewed were well written. One particular area of strength was the incorporation of MACT standards into the permits with the appropriate level of detail so that one could determine applicable standards without the need to reference the Code of Federal

Regulations as an adjunct. The permits included all necessary periodic monitoring. Where DAQ made a finding that no monitoring was required to show compliance with an applicable requirement, a specific numerical demonstration was included to show a wide margin of compliance with the applicable requirement and an actual emission rate (i.e. there was little probability that an applicable requirement associated with an allowable emission rate could be violated under a specific operating scenario).

In most instances, facilities submitted required monitoring details in a timely manner. When a facility failed to do so, DAQ issued an NOV requiring them to do so along with civil penalties assessed for the failure to submit the monitoring information.

General File Issues

- Many monitoring reports and compliance certifications were not found to be available in the central files during the monitoring and permit file review. According to 40 CFR 70.6(a)(3) where required permit content is dictated, monitoring reports, compliance certifications, and these submissions must be available for review in the public permit file. These records must be kept for a period of no less than 5 years per 40 CFR 70.8(a)(3)(ii)(B), including emission inventory submissions as well.
- As new MACT standards become effective, Part 63 requires the State to open the operating permit of every source subject to the new standard to revise the permit to include all required conditions as needed and include compliance dates for the new standard. It was noted in many cases, this was delayed until the following permitting action for that source and permit revision.

Specific Programmatic Concerns

North Carolina must submit to EPA any regulatory updates to the title V program since full title V program approval in October 2001. The provisions that we believe have been changed since full program approval were detailed in a July 25, 2005 letter from Gregg Worley to Laura Butler. The program approval must be updated to include these changes so as to avoid gaps between the federally approved regulations and the current program regulations

North Carolina Regulation 15A NCAC 2Q.0527, which appears in the title V program regulations at 2Q.0500, is the implementation of Senate Bill 245 – notice of intent to construct. EPA cannot approve this as part of North Carolina's title V program regulations as it eliminates mandatory provisions of North Carolina's title V program regulations related to public notice, affected state and EPA review. We recommend that this Section be removed from the title V program regulations and installed in the minor source permitting program regulations located at 2Q.0300.

DAQ has been treating a single permit document as two permits for title V modification

purposes. DAQ's regulations do not provide for this approach. In addition this treatment serves to lengthen, not shorten, the procedural aspects of obtaining preconstruction and operating approval in the State of North Carolina. Regional staff continue to receive complaints from North Carolina industry related to the lengthened process for title V permit modification. We recommend that this practice either be discontinued or that North Carolina update their title V program regulations to explicitly allow for this process.

DAQ has begun issuing minor permit modifications in draft form and allowing for the drafts to become final without further action on the part of DAQ. This approach is in conflict with North Carolina Regulation 2Q.0518(e) and North Carolina General Statute 143-215.108(d)(1) and 143-215.108(d)(2) (As attested to by North Carolina Attorney General Michael Easley in DAQ's original title V program submittal dated November 5, 1993) which do not allow the default issuance of a permit. DAQ must cease this practice until such time as this practice is allowed in DAQ's title V program regulations and/or North Carolina General Statutes.

It has come to our attention that in some instances DAQ utilizes the section 502(b)(10) change to change existing permit requirements that are monitoring, reporting, and recordkeeping. Provisions related to the section 502(b)(10) change found at 15A NCAC 2Q.0523 do not allow the use of these expedited changes to alter existing permit limitations on requirements such as monitoring, reporting, and recordkeeping requirements. We recommend that there be in-house training on the proper use of section 502(b)(10).

It came to our attention that the State chooses to issue a final determination for all title V permitting actions. This requirement originates as a State requirement that could be eliminated to reduce the need for additional costs associated with this action.

North Carolina New Source Review (NSR) Program Review

On June 22, 2006, EPA's Region 4 conducted a review of the North Carolina DAQ NSR permit program. The NSR program review consisted of administering a questionnaire developed for EPA's national NSR program review project. Since EPA has reviewed virtually all of DAQ's major NSR permits in recent years, no major NSR permits were evaluated as part of the on-site review.

The primary EPA staff person conducting the review was Jim Little from EPA's Air Permits Section. DAQ's participants were William Willets and Chuck Buckler.

DAQ has a SIP-approved NSR program with its own NSR rules. DAQ therefore has authority to issue both major and minor NSR permits. Because ozone and particulate matter (PM_{2.5}) nonattainment areas have been designated in North Carolina, the applicable major NSR permitting regulations are the regulations for prevention of significant deterioration (PSD) and the regulations for nonattainment areas. However, as discussed below, DAQ has not had to process any major nonattainment NSR permits.

DAQ's organizational structure for major NSR air permitting consists of the central office staff in Raleigh. DAQ's NSR permitting jurisdiction covers all of North Carolina except for Buncombe County (Asheville), Forsyth County (Winston-Salem), and Mecklenburg County (Charlotte), which have their own SIP-approved permitting programs.

Effective May 1, 2005, DAQ adopted nonattainment NSR rule revisions pursuant to EPA's December 2002 NSR rule revisions. DAQ's PSD NSR rule revisions pursuant to EPA's NSR rule revisions became effective on July 28, 2006. Since DAQ has not issued any major nonattainment NSR permits under the nonattainment NSR rule revisions and since the NSR program review took place prior to the effective date of the July 2006 PSD rule revisions, the program review covered only DAQ's administration of NSR rules in effect prior to the May 2005 nonattainment NSR and July 2006 PSD rule revisions. Future discussions between DAQ and EPA should prove beneficial as both agencies gain experience with the attainment (PSD) and nonattainment NSR rule revisions that have taken effect in North Carolina.

At the beginning of the on-site review, DAQ provided a copy of the program review questionnaire annotated with DAQ's answers. For many questionnaire items, the answers provided by DAQ are more detailed than indicated in the summary discussion below. The annotated questionnaire from DAQ will be on file at EPA Region 4 for reference if needed.

The headings in the following report duplicate the headings in the NSR program review questionnaire administered during the visit.

Overview of New Source Review (NSR) Permitting Program

A. NSR Permits

All permit applications and other permit-related documents are logged into DAQ's IBEAM database. Permits that include PSD avoidance conditions are coded as such.

In calendar year 2005, NSR permit issuance consisted of two PSD permits, no major nonattainment NSR permits, and numerous minor permits. From the time that a permit application is deemed complete, the average period for permit issuance is 6.5 months for PSD permits and 2.3 months for minor NSR permits.

For major modifications of existing major sources in attainment areas, DAQ issues a single permit covering both construction and operation. For proposed greenfield major sources in attainment areas, DAQ issues a PSD construction permit, followed by a title V operating permit within 12 months after operation begins. However, nothing prohibits a greenfield source owner from requesting a merged construction and operating permit.

B. Staff and Training

At the time of the on-site program review, DAQ staff personnel with direct NSR responsibilities included two supervisors, six engineers, four meteorologists, and two administrative assistants.

NSR staff training includes on-the-job training, mentoring of new staff by experienced staff, in-house presentations, and attendance at training workshops offered outside the agency. DAQ is interested in any future training opportunities provided by EPA.

C. NSR Implementation

DAQ generally follows EPA's NSR program guidance and policy as direction for implementing NSR procedures in North Carolina. Exceptions are DAQ's approach to best available control technology (BACT) evaluations and to project netting. (See discussions below.)

D. Public Participation

All PSD and major nonattainment NSR permitting actions are public noticed. Synthetic minor permits (unless part of title V permitting) and some true minor permits are also public noticed. DAQ maintains a list of active permit applications on a publicly accessible Web site.

Public notices on draft NSR permits are published in a newspaper of general circulation and sometimes also in a large regional newspaper. The public comment period can be extended upon request, but this seldom happens.

DAQ does not automatically hold public hearings on PSD permits. The last public hearing was several years ago.

Public notices for PSD permits do not state quantitatively the amount of PSD increment consumed. Instead, DAQ makes a qualitative statement about increment compliance. This approach is generally consistent with federal regulations in 40 CFR 51.166(q) where the public notice requirement calls for a statement of "the degree of increment consumption." EPA recommends that DAQ give consideration to including a quantitative statement of increment consumption in future public notices.

E. Program Benefits

DAQ believes that the NSR program provides an incentive for sources to reduce emissions below major source levels and helps sustain good air quality.

Major NSR Permitting

EPA was interested to learn about the existence and the purpose of DAQ's Permits Work Group and the Outside Involvement Committee. The Permits Work Group is a decision-making group that meets every quarter to discuss various issues, including NSR issues. Permits Work Group decisions are typically issued in the form of a memo to DAQ. These memos are considered public documents, but no mechanism exists for automatic dissemination to the public. EPA would appreciate the opportunity to review some of the memos providing answers to questions addressed by the Permits Work Group.

A. Applicability

One of the source categories with a 100-ton-per-year major source threshold is "chemical process plants." DAQ's current policy is not to use SIC Major Group 28 (the first two digits of the SIC code) as the defining criterion for chemical process plant classification. EPA's file review indicated that one or more Major Group 28 sources may have been viewed in the past as having a 250-ton-per-year major source threshold. DAQ must review its permits database for Major Group 28 sources to assess whether any corrective action is needed.

At the time of the program review, the permitting staff acknowledged the practice of using the 250 ton per year (tpy) threshold for PSD applicability for chemical process plants (i.e., SIC code 28) in lieu of the 100 tpy threshold for major sources as defined by the Clean Air Act for those sources. Since that time the Region has been informed by the Permit Manager that these sources will continue to be treated as sources with a 250 tpy applicability level. Sources with primary SIC code 28 are considered by the Agency to be chemical process plants. As was provided to DAQ staff prior to and at the time of EPA's June 2006 program review, our specific concerns relate to the following facilities with primary SIC code 28: Engineered Polymer Solutions, GlaxoSmithKline, Eon Pharma, and Wright Corporation. Our specific concerns related to the 100

tpy applicability threshold for installations with aggregate boiler British Thermal Units (BTU) ratings in excess of 250 million BTU heat input per hour are for Unifi Kinston LLC and SGL Carbon. The practice of using the 250 tpy threshold for PSD applicability determinations for source categories with a 100 tpy threshold is in direct conflict with the PSD regulations and the Clean Air Act¹. We also recommend that DAQ review how applicability is determined for the other 27 major source categories as defined by the Clean Air Act and the PSD regulations.

DAQ includes condensible particulate matter emissions when assessing NSR applicability and for other NSR permitting purposes (BACT determinations, impact assessment modeling, etc.).

DAQ counts fugitive emissions toward major NSR applicability only for emission sources that are in a listed source category. EPA pointed out that the NSR rule revisions for modifications of existing sources contain a provision on fugitive emissions that differs from past practice. When making calculations of baseline emissions and projected actual emissions for NSR applicability purposes, fugitive emissions are to be included regardless of source category. This federal rule provision may be amended in the future.

PSD applicability for a modification project includes consideration of emissions increases from units that themselves are not being modified but that are affected by the modification. Debottlenecked and increased utilization units are examples of affected units. DAQ's procedure for calculating emissions increases from debottlenecked and increased utilization units may have departed somewhat from past EPA guidance. EPA will provide further information on this subject to DAQ, taking into account any revised EPA guidance that might apply now that DAQ has adopted NSR rule revisions for both nonattainment and attainment areas.

DAQ and EPA discussed whether DAQ should be using the hourly emissions increase contained in the Duke Energy decision by the U.S. Court of Appeals for the Fourth Circuit. EPA recommends further discussion before DAQ makes any use of the Fourth Circuit decision.

DAQ allows use of "project netting" to assess PSD applicability for modifications of existing sources. This is a departure from current EPA policy, which may be addressed in future EPA rulemaking.

¹ We note that DAQ views EPA's use of SIC Major Group 28 to define sources characterized as "chemical process plants" as "guidance."

B. Prevention of Significant Deterioration Permitting

The DAQ representatives present during the NSR program review interview were knowledgeable of PSD permitting requirements. EPA is available to assist DAQ as needed with future PSD permit applications and future PSD applicability questions.

Although DAQ has processed few PSD permits in the last year or two, the number of PSD permitting actions now pending has increased. This increase will provide on-the-job experience that will help DAQ staff remain current in understanding of PSD regulatory requirements.

DAQ maintains its long-held position that a top-down BACT analysis is not required for PSD reviews. This is a departure from EPA policy. DAQ believes that its PSD permitting procedures result in BACT determinations similar to those that would be obtained with the top-down procedure.

DAQ has not always agreed with EPA regarding the need for controls in BACT determinations for VOC emissions. This is in part due to an assumption that industrial VOC emissions increases do not contribute significantly to ozone formation. Energy consumption by VOC control devices and nitrogen oxides emissions from thermal oxidation control devices are further considerations that have shaped DAQ's position on VOC BACT. DAQ agrees that VOC emissions are required to be afforded the same level of BACT evaluation as any other regulated NSR pollutant.

DAQ has not required pre-construction ambient air quality monitoring in many years. The DAQ representatives recalled two instances when post-construction ambient air quality monitoring was required (PM₁₀ for a Nucor Steel project and sulfur dioxide for a Duke Power project).

C. Nonattainment Major NSR Permitting

Several counties in North Carolina within DAQ's NSR jurisdiction are designated nonattainment areas for either the 8-hour ozone national ambient air quality standard (NAAQS) or the PM_{2.5} NAAQS. Major nonattainment NSR permitting requirements are applicable in these areas. However, DAQ has not yet had to process any major nonattainment NSR permits and therefore could not respond to the nonattainment portion of the NSR program review questionnaire based on actual experience. Responses were necessarily in terms of how DAQ would expect to carry out nonattainment NSR permitting responsibilities. EPA's Region 4 office is available to assist DAQ with major nonattainment NSR permits as needed.

DAQ has the regulatory framework for an emissions reduction credit (ERC) banking program. The DAQ Permits Section works closely with the Planning Section to make sure that any proposed ERCs are appropriately accounted for in relation to attainment demonstrations. A good example is the recent transfer of ERCs from Kannapolis Energy Partners to Bowater Company. DAQ requires that ERCs be real quantifiable, enforceable, and surplus. Applications for ERCs would be evaluated in a manner similar to the procedure for assessing PSD netting evaluations.

NSR Avoidance

A. RMRR Exemption

DAQ is aware of the procedures required for a routine maintenance, repair, and replacement (RMRR) exemption assessment and has made about six formal RMRR assessments in the last five years. (DAQ provided an example RMRR letter.)

B. PCP Exemption

Note: Because the pollution control project (PCP) exemption rules and policies have been vacated by the U.S. Court of Appeals for the District of Columbia Circuit as of June 24, 2005, no questions about PCP exemptions were asked.

C. Circumvention/Aggregation

DAQ has a sound understanding of the aggregation principle and the need to prevent PSD circumvention through disaggregation of projects. One of the difficulties DAQ faces in this regard is assessment of projects at the numerous military installations in North Carolina, some of which have multiple commands that function semi-independently. EPA recommends further discussion to help develop evaluation procedures for military installations.

D. Synthetic Minor Permit Limits

When an applicant requests a synthetic minor emissions limit, DAQ establishes enforceable emissions and/or operational limits that are included in the permit. A separate list of synthetic minor permits is not maintained, but such permits can be identified and extracted from the IBEAM database. Synthetic minor source permittees track operational and emissions limits monthly and report semi-annually.

DAQ sometimes requires or performs modeling in conjunction with issuing synthetic minor permits.

E. Relaxation

DAQ is knowledgeable of NSR regulatory "relaxation" provisions. The Region has a specific concern with DAQ's application of the source "relaxation" provisions in the Moreflex title V permit as communicated to DAQ staff in written comments on the file review. DAQ should respond to the Region's concern, in writing, addressing why it believes the addition of a process heater to the initial production line qualifies for a one-time doubling treatment for SO₂ emissions that the Facility received

Minor Source Construction Permitting Program

DAQ does not have specific emissions control requirements for minor sources. Minor source permits contain an identification of any requirements being avoided (for example, PSD requirements).

Of interest to EPA during the minor source construction permitting discussion was DAQ's Notice of Intent to Construct (NOITC) procedure. The NOITC procedure was established by legislative action and is not prescribed by rule. EPA obtained information on the NOITC procedure to better understand the types of modifications eligible for the procedure. The Procedure is not available for modifications subject to major NSR condition.

Modeling

A. PSD Modeling

DAQ has a modeling guideline "shell" consisting of 15 questions. Project-specific modeling protocols are developed based on the shell.

For cumulative impact modeling, DAQ provides an initial emissions inventory to permit applicants. The modeling inventory is usually based on maximum potential emissions. Sometimes actual emissions are used if potential emissions are not available. Applicants are responsible for updating the initial inventory (for example, to fill in missing data.) Applicants send the updated inventory to DAQ for approval. Applicants can use the 20D procedure to eliminate sources. This procedure is spot checked by DAQ.

In the event that modeling shows a predicted violation of a NAAQS or a PSD increment, DAQ can still issue a permit if the applicant demonstrates that the proposed project does not contribute significantly to the violation.

Because nearly all locations in North Carolina are within 200 kilometers of a PSD Class I area, adequate coordination with Class I federal land managers (FLMs) is essential to help reduce PSD permitting delays. DAQ discusses virtually every PSD permit application with the appropriate FLM, and modeling protocols are sent to the FLMs for review.

North Carolina has state ambient air quality standards (SAAQS) that are applicable in addition to NAAQS. Specifically, SAAQS exist for total suspended particulate matter (TSP). So long as these SAAQS remain in effect, compliance with the standards must be demonstrated as part of PSD permitting for projects that involve particulate matter emissions when such emissions are subject to PSD review.

B. Nonattainment Major NSR Modeling

For the types of nonattainment areas under DAQ's jurisdiction (ozone and PM_{2.5}), only the PM_{2.5} nonattainment areas would be subject to modeling considerations (to ensure that emission offsets would provide a net air quality benefit). DAQ has not yet had to process a major NSR permit for a PM_{2.5} nonattainment area.

C. Minor Source Modeling

DAQ typically does not require minor source modeling. Modeling might be required for some projects to show compliance with national ambient air quality standards depending on the location of the project and quantity of emissions.

D. Increment Tracking

Baseline dates are county-specific. Allowable emissions are generally used for increment tracking purposes. Increment tracking is conducted only in association with new applications and not on a fixed schedule. If requested by the public, DAQ can provide a printout of sources that affect PSD increment consumption.

NSR Suggested Improvements and Further Actions

The following NSR-related suggested improvements and further actions are a restatement of previous comments:

1. EPA recommends that DAQ give consideration to including a quantitative statement of increment consumption in future public notices.
2. EPA would appreciate the opportunity to review some of the memos providing answers to questions evaluated by the Permits Work Group.
3. EPA's file review indicated that one or more Major Group 28 sources may have been viewed in the past as having a 250-ton-per-year major source threshold. This is inconsistent with the PSD Regulations and the Clean Air Act.
4. DAQ's procedure for calculating emissions increases from debottlenecked and increased utilization units may have departed somewhat from past EPA guidance. EPA will provide further information on this subject, taking into account any revised EPA guidance that might apply now that DAQ has adopted NSR rule revisions for both nonattainment and attainment areas.
5. EPA recommends further discussion before DAQ invokes the Duke Energy decision by the U.S. Court of Appeals for the Fourth Circuit regarding an hourly emissions increase NSR applicability test.

6. DAQ allows use of "project netting" to assess PSD applicability for modifications of existing sources. This is a departure from EPA policy. EPA recommends that DAQ not use the project netting approach pending the outcome of EPA's rulemaking action on this topic
7. DAQ maintains its long-held position that a top-down BACT analysis is not required for PSD reviews. This is a departure from EPA policy. DAQ believes that its PSD permitting procedures result in BACT determinations similar to those that would be obtained with the top-down procedure.
8. DAQ has not always agreed with the EPA regarding the need for stringent controls in BACT determinations for VOC emissions. DAQ agrees that VOC emissions are required to be afforded the same level of BACT evaluation as any other regulated NSR pollutant.
9. One of the difficulties DAQ faces regarding aggregation of projects for NSR applicability purposes is assessment of projects at the numerous military installations in North Carolina, some of which have multiple commands that function semi-independently. EPA recommends further discussion to help develop evaluation procedures for military installations.

Conclusion

At the conclusion of the onsite portion of the Title V and NSR program reviews, Region 4 personnel met with DAQ officials to conduct an exit interview. During this exit interview Region 4 shared the findings of the review and laid out the next steps for completion of the final report. Personnel in attendance from EPA Region 4 were Randy Terry, Jim Little, Scott Miller, James Purvis, Gregg Worley and Kay Prince. DAQ officials in attendance included Keith Overcash, Charlie Yirka, Charles Valrie, and Donnie Redmond.

Overall, EPA believes that the North Carolina DAQ is generally meeting most title V and NSR program requirements. However, EPA does have several concerns about DAQ's title V and NSR programs and is committed to working with DAQ to ensure that these problems are resolved. EPA detailed in separate correspondence, dated August 24, 2006, our concerns about DAQ's accounting practices and the specific next steps that will be needed to address this issue. EPA is also committed to working with DAQ to establish a timeline for resolving the remaining concerns.

